

We claim:

1. A high abrasion and weather resistant water-based coating comprising boron nitride, high molecular weight silicone resin, at least one resin
5 binder and at least one cross-linking agent
2. The coating of claim 1, further comprising at least one high UV stabilizer, high UV absorber or mixtures thereof.
3. The coating or claim 1 wherein the at least one resin binder comprises a blend of acrylic resin, polyurethane resin and fluoropolymer.
- 10 4. The coating of claim 3 wherein the at least one resin binder comprises a blend of styrene acrylic, aliphatic polyester polyurethane, fluorinated acrylic copolymers, Fluoro Ethylene-Alkyl Vinyl Ether, fluorinated alternative copolymers or mixtures thereof.
5. The coating of claim 3, wherein the ratio of acrylic resin to polyurethane
15 resin to fluoropolymer is in the range of about 1:1:1 to about 1:5:10.
6. The coating of claim 1 further comprising one or more of the group comprising dispersing agents, rheology modifiers, amines, preservatives, wetting agents, co-solvents, carbon black, polyamide, chlorinated polyol, catalysts, and mixtures thereof.
- 20 7. The coating of claim 6, further comprising one or more of the group comprising epoxy, epoxy silane, carbodiimide, melamine, oxazoline, polyisocyanate, isocyanate, blocked isocyanate, aziridine, melamine – formaldehyde, polyaziridine, urea formaldehyde or mixtures thereof.
8. The coating of claim 1, wherein the high molecular weight silicone resin
25 has a molecular weight in the range from about 1,000 to about 800,000.
9. The coating of claim 8, wherein the high molecular weight silicone resin comprises a blend of silicone resins having different molecular weights.

10. The coating of claim 9, wherein the blend of silicone resins comprises a blend of silicone resins having molecular weights in the ranges of about 1,000 to about 2,500; about 5,000 to about 20,000; and about 400,000 to about 800,000.
- 5 11. The coating of claim 8, wherein the high molecular weight silicone resin is polydimethoxysiloxane.
12. The coating of claim 3, wherein the coating comprises in the range of from about 0.1 wt % to about 20 wt % boron nitride.
13. The coating of claim 12 wherein the coating comprises in the range of
10 about 0.5 to about 5 wt % boron nitride.
14. The coating of claim 3, wherein the coating comprises in the range of about 1 wt % to about 40 wt % silicone resin.
15. The coating of claim 14, wherein the coating comprises in the range of about 8 wt % to about 20 wt % silicone resin.
- 15 16. The coating of claim 3, wherein the coating comprises in the range of about 4 wt % to about 30 wt % of the at least one resin binder.
17. The coating of claim 16, wherein the coating comprises in the range of about 4 wt % to about 20 wt % of the at least one resin binder.
18. The coating of claim 1, wherein the boron nitride is in the form of a cubic
20 or hexagonal structure.
19. An article coated with the coating of claim 1.
20. The article of claim 19, wherein the article comprises a weatherstrip, windshield wiper or automotive seal.
21. A flock replacement coating for glass run comprising the coating of claim
25 1.
22. An appearance coating for an outer belt comprising the coating of claim 1.

23. A method of producing a high abrasion and weather resistant coating comprising:
- (a) forming a pre-dispersion containing boron nitride and water; and
 - (b) adding silicone resin and at least one resin binder and at least one cross-linking agent to the pre-dispersion.
24. The method of claim 23, further comprising at least one high UV stabilizer, high UV absorber or mixture thereof.
25. The method of claim 23 wherein the at least one resin binder comprises a blend of acrylic resin, polyurethane resin and fluoropolymer.
26. The method of claim 25 wherein the at least one resin binder comprises a blend of styrene acrylic, aliphatic polyester polyurethane, fluorinated acrylic copolymers, Fluoro Ethylene-Alkyl Vinyl Ether, fluorinated alternative copolymers or mixtures thereof.
27. The method of claim 25, wherein the ratio of acrylic resin to polyurethane resin to fluoropolymer is in the range of about 1:1:1 to about 1:5:10.
28. The method of claim 23 further comprising the step of adding one or more of the group comprising dispersing agents, rheology modifiers, amines, preservatives, wetting agents, co-solvents, carbon black, polyamide, chlorinated polyol, catalysts, and mixtures thereof.
29. The method of claim 28, further comprising the step of adding one or more of the group comprising epoxy, epoxy silane, carbodiimide, melamine, oxazoline, polyisocyanate, isocyanate, blocked isocyanate, aziridine, melamine-formaldehyde, polyaziridine, urea formaldehyde or mixtures thereof.
30. The method of claim 23, wherein the high molecular weight silicone resin has a molecular weight in the range from about 1,000 to about 800,000.

31. The method of claim 30, wherein the high molecular weight silicone resin comprises a blend of silicone resins having different molecular weights.
32. The method of claim 31, wherein the blend of silicone resins comprises a blend of silicone resins having molecular weights in the ranges of about
5 1,000 to about 2,500; about 5,000 to about 20,000; and about 400,000 to about 800,000.
33. The method of claim 30, wherein the high molecular weight silicone resin is polydimethoxysiloxane.
34. The method of claim 25, wherein the coating comprises in the range of
10 from about 0.1 wt % to about 20 wt % boron nitride.
35. The method of claim 34, wherein the coating comprises in the range of about 0.5 to about 5 wt % boron nitride.
36. The method of claim 26, wherein the coating comprises in the range of about 1 wt % to about 40 wt % silicone resin.
- 15 37. The method of claim 36, wherein the coating comprises in the range of about 8 wt % to about 20 wt % silicone resin.
38. The method of claim 25, wherein the coating comprises in the range of about 4 wt % to about 30 wt % of the at least one resin binder.
39. The method of claim 38, wherein the coating comprises in the range of
20 about 4 wt % to about 20 wt % of the at least one resin binder.
40. The method of claim 23, wherein the boron nitride is in the form of a cubic or hexagonal structure.
41. An article coated via the method of claim 24.
42. The article of claim 41, wherein the article coated comprises a
25 weatherstrip, windshield wiper or automotive seal.
43. A flock replacement coating for glass run coated via the method of claim 23.

44. An appearance coating for an outer belt coated via the method of claim 23.